RUPTURED SINUS OF VALSALVA ANEURYSM WITH AN ODD PRESENTATION

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A 22-year-old male with no significant past medical history presented with epigastric pain and diarrhea that had been persisting for 2.5 weeks. He was found to have a continuous murmur best heard at the right sternal border as well as right-sided heart failure. Transthoracic echocardiography revealed normal left ventricular and right ventricular systolic function, dilated left and right atrium, and a sinus of Valsalva aneurysm with an aortic right atrial shunt. Transesophageal echocardiography (TEE) and cardiac magnetic resonance imaging (MRI) were ordered for further evaluation. Both TEE (the top row) and cardiac MRI (the bottom row) confirmed a ruptured sinus of Valsalva aneurysm with a communication between the noncoronary cusp and right atrium that was approximately 1 cm in size resulting in left-right shunting (Qp-Qs ratio 2:1). The ruptured sinus of Valsalva aneurysm was successfully repaired by resection of the windsock aorta to the right atrial fistula using a CorMatrix® patch (CorMatrix, Roswell, GA) to close the hole. After the procedure, a TEE was performed and showed no residual shunt.

Arrow shows the ruptured sinus of Valsalva aneurysm. RA: right atrium; LA: left atrium; LV: left ventricle; RV: right ventricle; Ao: aorta